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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/464,784	12/17/1999	MICHAEL B. FREEMAN	COS99034	8064

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WORLDCOM, INC.
TECHNOLOGY LAW DEPARTMENT
1133 19TH STREET NW
WASHINGTON, DC 20036

EXAMINER

CHOW, CHARLES CHIANG

ART UNIT	PAPER NUMBER
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2685

DATE MAILED: 01/13/2004

20

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/464,784

Applicant(s)

FREEMAN ET AL.

Examiner

Charles Chow

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-31 is/are rejected.
- 7) ☒ Claim(s) 32-35 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____. 6) ☐ Other: _____

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**Office Action for
Applicant's Amendment
Received on 10/09/2003**

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1-4, 6-31 are rejected under 35 U.S.C. 103(a) as being unpatentable Cameron et al. (US 6,317,490 B1) in view of Doherty et al. (US 5,333,184), and further in view of Walker et al. (US 5,949,875).

Regarding **claim 1**, Cameron et al. ("Cameron") teaches an apparatus for managing call billing records for users of a signaling network comprising a gateway interface, the network processor is further operative to access a directory in telecommunication network of the call event record associated with call billing data in the first structure within the gateway (abstract, figure in cover page, summary of invention).

Cameron teaches the co-carriers from the inter-exchange carrier IXC and local-exchange carrier LEC (col. 2, line 61 to col. 3, line 22), the billing administrators for access billing information in a telecommunication system (title, abstract, figure in cover page).

Cameron teaches the system has telecommunication networks, administration interface, and the user interface, for authorization from telecommunication network 12, via gateway network interface 500, the polling gateway to collect billing data of calls, for generating an

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output file representing the call billing data, the network interface coupled to a telecommunications network, the network interface permitting the billing administrator to poll the telecommunication network for access for billing information data from repository (col. 7, lines 16-44; col. 7, lines 37-44; col. 9, lines 51-58; col. 9, line 24 to col. 10, line 9). Cameron teaches the network interface for placing request for real time updating billing information from telecommunication network, such that billing administrator can track the billing information by accessing real time billing information (col. 1, lines 18-37).

Camerson does not clearly teach the transmitting of the call billing data in the second format to data network for processing the billing settlement.

Doherty teaches a data network and transmit the second data structure format to the data network for billing processing (abstract, in Fig. 1, it shows the system utilizes the exchange message interface message format, EMI, carrying the primary interexchange carrier indicator for call billing purpose associated with the subscriber). In column 7, line 52-61, column 8, line 5-15, column 9, line 22-31, it shows the system generates the AMA message format for the call, converts said AMA format to the EMI message format, and transmits the EMI message record format to the call rating system. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Cameron, and to include Doherty's transmitting in the EMI second format to the call rating system, such that system could be upgraded and more flexible of handling a second billing data format.

Cameron and Doherty do not clearly teach the billing processing by a carrier access

billing system for settlement with the internet service provider. Walker et al. ("Walker") teaches the billing collection system of the computer user for accessing information, services, provided by servers in the internet, Web, 900 network (abstract, figure in cover page, Fig. 2, Fig. 6, Fig. 15; col. 1, lines 8-21; col. 4, lines 1-8; col. 8, lines 1-3). The 900 number is for the user to access internet web service (col. 2, line 39-44) for information or service or goods (col. 1, line 9-10). The user's billing information is collected and transfer to local exchange carrier LEC and the LEC distributes the phone bill to user for user's payment (col. 7, line 41-50; col. 9, line 65 to col. 15). Hence, Walker teaches the collecting/processing of the user's internet phone bill for the internet service provider. Walker has taught the distributed billing processing at the local exchange carrier LEC and the method for collecting the billing information from LEC as shown above. Walk teaches the efficient billing collecting and processing of the user's internet phone bill for the internet service provider. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Cameron above, and to include Walker's collecting/processing of the user's internet phone bill for the internet service provider, such that the system could be upgraded for efficiently collecting, processing the internet service's billing information.

Regarding **claim 2**, Cameron has taught above the signaling gateway in the system.

Regarding **claim 3**, Cameron has taught above in claim 1, the interface that mates with communication coupled to the gateway, via the network interface 500, gateway, the polling gateway to collect billing data of calls, for generating an output file representing the call billing data, the network interface coupled to a telecommunications network, the network interface permitting the billing administrator to poll the telecommunication network for

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access for billing information data from repository (col. 7, lines 16-44; col. 7, lines 37-44; col. 9, lines 51-58; col. 9, line 24 to col. 10, line 9). Cameron teaches the network interface for placing request for real-time updating billing information from telecommunication network, such that billing administrator can track the billing information by accessing real time billing information (col. 1, lines 18-37).

Regarding **claim 4**, Cameron has taught above in claim 1 the polling the gateway to collect call billing in the first data structure.

Regarding **claim 6**, Doherty has taught above the AMA format in claim 1.

Regarding **claim 7**, Doherty has taught above a data network communicating with the network processor and the receiving of the second data AMA format.

Regarding **claim 8**, Walker has taught above the local traffic system in the local exchange carrier for user's billing information is collected and transfer to local exchange carrier LEC and the LEC distributes the phone bill to user for user's payment (col. 7, line 41-50; col. 9, line 65 to col. 15).

Regarding **claim 9**, Walker has taught the user computer platform for access Web/Internet service, as the claimed processor network platform.

Regarding **claim 10**, Cameron has taught above a system for managing call billing records for users of a signaling network comprising a gateway interface (the network processor is further operative to access a directory in telecommunication network of the call event record associated with call billing data in the first structure within the gateway, abstract, figure in cover page, summary of invention).

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Cameron teaches the co-carriers from the inter-exchange carrier IXC and local-exchange carrier LEC (col. 2, line 61 to col. 3, line 22), the billing administrators for access billing information in a telecommunication system (title, abstract, figure in cover page).

Cameron teaches the system has telecommunication networks, administration interface, and the user interface, for authorization from telecommunication network 12, via gateway network interface 500, the polling gateway to collect billing data of calls, for generating an output file representing the call billing data, the network interface coupled to a telecommunications network, the network interface permitting the billing administrator to poll the telecommunication network for access for billing information data from repository (col. 7, lines 16-44; col. 7, lines 37-44; col. 9, lines 51-58; col. 9, line 24 to col. 10, line 9).

Cameron teaches the network interface for placing request for real time updating billing information from telecommunication network, such that billing administrator can track the billing information by accessing real time billing information (col. 1, lines 18-37).

Camerson does not clearly teach the transmitting of the call billing data in the second format to data network for processing the billing settlement. Doherty teaches a data network and transmit the second data structure format to the data network for billing processing (abstract, in Fig. 1, it shows the system utilizes the exchange message interface message format, EMI, carrying the primary interexchange carrier indicator for call billing purpose associated with the subscriber). In column 7, line 52-61, column 8, line 5-15, column 9, line 22-31, it shows the system generates the AMA message format for the call, converts said AMA format to the EMI message format, and transmits the EMI message record format to the call rating system.

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Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Cameron, and to include Doherty's transmitting in the EMI second format to the call rating system, such that system could be upgraded and more flexible of handling a second billing data format.

Cameron and Doherty do not clearly teach the billing processing by a carrier access billing system for settlement with the internet service provider.

Walker teaches the billing collection system of the computer user for accessing information, services, provided by servers in the internet, Web, 900 network (abstract, figure in cover page, Fig. 2, Fig. 6, Fig. 15; col. 1, lines 8-21; col. 4, lines 1-8; col. 8, lines 1-3). The 900 number is for the user to access internet web service (col. 2, line 39-44) for information or service or goods (col. 1, line 9-10). The user's billing information is collected and transfer to local exchange carrier LEC and the LEC distributes the phone bill to user for user's payment (col. 7, line 41-50; col. 9, line 65 to col. 15). Hence, Walker teaches the collecting/processing of the user's internet phone bill for the internet service provider. Walker has taught the distributed billing processing at the local exchange carrier LEC and the method for collecting the billing information from LEC as shown above. Walk teaches the efficient billing collecting/processing of the user's internet phone bill for the internet service provider. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Cameron above, and to include Walker's collecting/processing of the user's internet phone bill for the internet service provider, such that the system could be upgraded for efficiently collecting, processing the internet service's billing information

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Regarding **Claim 11**, Doherty has taught above in claim 1 the periodically receiving billing data in second structure format.

Regarding **claim 12**, Cameron has taught the polling of gateway to collect billing in first data format.

Regarding **claim 13**, Cameron has taught above the gateway polling at preset interval to update the billing information.

Regarding **claim 14**, Doherty has taught above the receiving call billing data in second format.

Regarding **claim 15**, Walker has taught above the local traffic system in local exchange carrier LEC, and Doherty has taught above the AMA format for billing process..

Regarding **claim 16**, Cameron has taught above in claim 3 for the network processor including an interface operative to mate the network processor with the signaling gateway.

Regarding **claim 17**, Cameron teaches an apparatus for managing call billing records for users of a signaling network comprising a gateway interface (the network processor is further operative to access a directory in telecommunication network of the call event record associated with call billing data in the first structure within the gateway, abstract, figure in cover page, summary of invention).

Cameron teaches the co-carriers from the inter-exchange carrier IXC and local-exchange carrier LEC (col. 2, line 61 to col. 3, line 22), the billing administrators for access billing information in a telecommunication system (title, abstract, figure in cover page).

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Cameron teaches the system has telecommunication networks, administration interface, and the user interface, for authorization from telecommunication network 12, via gateway network interface 500, the polling gateway to collect billing data of calls, for generating an output file representing the call billing data, the network interface coupled to a telecommunications network, the network interface permitting the billing administrator to poll the telecommunication network for access for billing information data from repository (col. 7, lines 16-44; col. 7, lines 37-44; col. 9, lines 51-58; col. 9, line 24 to col. 10, line 9). Cameron teaches the network interface for placing request for real time updating billing information from telecommunication network, such that billing administrator can track the billing information by accessing real time billing information (col. 1, lines 18-37).

Cameron does not clearly teach the transmitting of the call billing data in the second format to data network for processing the billing settlement. Doherty teaches a data network and transmit the second data structure format to the data network for billing processing (abstract, in Fig. 1, it shows the system utilizes the exchange message interface message format, EMI, carrying the primary interexchange carrier indicator for call billing purpose associated with the subscriber). In column 7, line 52-61, column 8, line 5-15, column 9, line 22-31, it shows the system generates the AMA message format for the call, converts said AMA format to the EMI message format, and transmits the EMI message record format to the call rating system. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Cameron, and to include Doherty's transmitting in the EMI second

format to the call rating system, such that system could be upgraded and more flexible of handling a second billing data format.

Cameron and Doherty do not clearly teach the billing processing by a carrier access billing system for settlement with the internet service provider. Walker teaches the billing collection system of the computer user, the first and second computer device for accessing information, services, provided by servers in the internet, Web, 900 network (abstract, figure in cover page, Fig. 2, Fig. 6, Fig. 15; col. 1, lines 8-21; col. 4, lines 1-8; col. 8, lines 1-3). The 900 number is for the user to access internet web service (col. 2, line 39-44) for information or service or goods (col. 1, line 9-10). The user's billing information is collected and transfer to local exchange carrier LEC and the LEC distributes the phone bill to user for user's payment (col. 7, line 41-50; col. 9, line 65 to col. 15). Hence, Walker teaches the collecting and processing of the user's internet phone bill for the internet service provider. Walker has taught the distributed billing processing at the local exchange carrier LEC and the method for collecting the billing information from LEC as shown above. Walk teaches the efficient billing collecting/processing of the user's internet phone bill for the internet service provider. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Cameron above, and to include Walker's collecting/processing of the user's internet phone bill for the internet service provider, such that the system could be upgraded for efficiently collecting, processing the internet service's billing information. Regarding **claims 18**, Walker has taught above the first computer device and signal gateway.

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Regarding claim 19, Walker has taught the second computer device including a network processor for the internet service.

Regarding **claim 20**, Walker has taught above the internet file transfer protocol for the internet service for their transferring of billing information to LEC.

Regarding **claim 21**, Walker has taught above the transferring billing data between first, second computers of the internet service.

Regarding **claim 22**, Cameron teaches a method of managing call billing generated from usage within a signaling network by users comprising collecting call billing data with a signaling gateway (the network processor is further operative to access a directory in telecommunication network of the call event record associated with call billing data in the first structure format within the gateway, abstract, figure in cover page, summary of invention).

Cameron teaches the co-carriers from the inter-exchange carrier IXC and local-exchange carrier LEC (col. 2, line 61 to col. 3, line 22), the billing administrators for access billing information in a telecommunication system (title, abstract, figure in cover page).

Cameron teaches the system has telecommunication networks, administration interface, and the user interface, for authorization from telecommunication network 12, via gateway network interface 500, the polling gateway to collect billing data of calls, for generating an output file representing the call billing data, the network interface coupled to a telecommunications network, the network interface permitting the billing administrator to poll the telecommunication network for access for billing information data from repository (col. 7, lines 16-44; col. 7, lines 37-44; col. 9, lines 51-58; col. 9, line 24 to col. 10, line 9).

Cameron teaches the network interface for placing request for real time updating billing information from telecommunication network, such that billing administrator can track the billing information by accessing real time billing information (col. 1, lines 18-37).

Camerson does not clearly teach the transmitting of the call billing data in the second format to data network for processing the billing settlement. Doherty teaches a data network and transmit the second data structure format to the data network for billing processing (abstract, in Fig. 1, it shows the system utilizes the exchange message interface message format, EMI, carrying the primary interexchange carrier indicator for call billing purpose associated with the subscriber). In column 7, line 52-61, column 8, line 5-15, column 9, line 22-31, it shows the system generates the AMA message format for the call, converts said AMA format to the EMI message format, and transmits the EMI message record format to the call rating system. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Cameron, and to include Doherty's transmitting in the EMI second format to the call rating system, such that system could be upgraded and more flexible of handling a second billing data format.

Cameron and Doherty do not clearly teach the billing processing by a carrier access billing system for settlement with the internet service provider. Walker teaches the billing collection system of the computer user for accessing information, services, provided by servers in the internet, Web, 900 network (abstract, figure in cover page, Fig. 2, Fig. 6, Fig. 15; col. 1, lines 8-21; col. 4, lines 1-8; col. 8, lines 1-3). The 900 number is for the user to

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access internet web service (col. 2, line 39-44) for information or service or goods (col. 1, line 9-10). The user's billing information is collected and transfer to local exchange carrier LEC and the LEC distributes the phone bill to user for user's payment (col. 7, line 41-50; col. 9, line 65 to col. 15). Hence, Walker teaches the collecting/processing of the user's internet phone bill for the internet service provider. Walker has taught the distributed billing processing at the local exchange carrier LEC and the method for collecting the billing information from LEC as shown above. Walk teaches the efficient billing collecting and processing of the user's internet phone bill for the internet service provider. Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to modify Cameron above, and to include Walker's collecting/processing of the user's internet phone bill for the internet service provider, such that the system could be upgraded for efficiently collecting, processing the internet service's billing information.

Regarding **claim 23**, Cameron has taught above for the routing of call billing data for user via network process gateway, network interface 500, to data network.

Regarding **claim 24**, it is well-known in the technology for generating billing invoice.

Regarding **claim 25**, Cameron has taught above in claim 3 above the routing call billing data, via network processor to data network.

Regarding **claim 26**, Cameron has taught above in claim 4 the transferring the call billing data.

Regarding **claim 27**, it is well-known in the technology for the generating an alarm signal with the network processor.

Regarding **claim 29**, Cameron has taught the incumbent local exchange carrier, in col. 2, line 61 to col. 3, line 22, the inter-exchange carrier, local-exchange carrier.

Regarding **claims 28, 30, 31**, Cameron has taught above local exchange carrier, as the incumbent local exchange carrier for the apparatus, system, and methods.

Claims Objection

2. Claims 32-35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

3. Applicant's arguments with respect to claims 1-4, 6-31 have been considered but are moot in view of the new ground(s) of rejection.

Regarding applicant's argument based upon the no teachings for the co-carrier (page 11, second middle paragraph) associated with the billing settlement with internet service provider (page 12 last paragraph to page 13, first paragraph), the ground of rejection has been changed, by utilizing Cameron-'290 for teaching of the co-carrier for accessing billing with local exchange carrier, and Walker-'875 for teaching of the billing for internet service network with local exchange LEC.

Cameron-'290 teaches the billing administrators for access billing information in a telecomm. system (title, abstract, figure in cover page), the system has telecommunication networks, administration interface, and the user interface, for authorization from telecomm. network 12, via network interface 500, as the gateway. Cameron teaches the co-carrier from the inter-exchange carrier IXC and local-exchange carrier LEC (col. 2, line 61 to col. 3, line 22).

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Regarding the billing settlement for internet service provider, Walker-'875 has the billing collection system of the computer user for accessing information, services, provided by servers in the internet, Web, 900 network (abstract, figure in cover page, Fig. 2, Fig. 6, Fig. 15; col. 1, lines 8-21; col. 4, lines 1-8; col. 8, lines 1-3). The 900 number is for the user to access internet web service (col. 2, line 39-44) for information or service or goods (col. 1, line 9-10). The user's billing information is collected and transfer to local exchange carrier LEC and the LEC distributes the phone bill to user for user's payment (col. 7, line 41-50; col. 9, line 65 to col. 15). Hence, Walker teaches the collecting/processing of the user's internet phone bill for the internet service provider. Therefore Cameron and Walker in combination has taught the co-carrier associated with the billing settlement with internet service provider.

Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Chow whose telephone number is (703)-306-5615.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban, can be reached at (703)-305-4385.

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to: (703) 872-9314 (for Technology Center 2600 only)


Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington, VA, Sixth Floor (Receptionist).

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is (703) 306-0377.

Charles Chow C.C.

December 29, 2003.


EDWARD F. URBAN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600